AMENDMENT TO THE CLAIMS:

The following claim set replaces all prior versions, and listings, of claims in the application:

1. (currently amended) Process for manufacturing a prosthetic joint with at least one loaded surface that consists at least partially of polyethylene, comprising:

(a) positionally restraining ~~compressing in a mould to a desired shape, between a hollow mould part and a plug,~~ one or more layers of a woven fabric of drawn gel-spun polyethylene fibres ~~at a pressure of at least 0.05 MPa and at a temperature between 120 and165°C and below the crystalline melting point of the polyethylene at the prevailing temperature and pressure,~~ without a matrix material being present between a plug and a socket-shaped mould each of which is heated to an elevated temperature;

(b) tensioning the one or more layers of woven fabric positionally restrained between the plug and socket-shaped mould by initially advancing the plug into pressing contact with a surface of the woven fabric for a time sufficient to allow the one or more layers of woven fabric to attain the elevated temperature of the plug; and thereafter

(c) compressing the one or more layers of woven fabric by continued advancement of the plug to thereby forcibly press the one or more layers of woven fabric into the socket-shaped mould to attain a prevailing pressure of at least 0.05 MPa and temperature between 120 and165°C and below the crystalline melting point of the polyethylene at the prevailing pressure and temperature, wherein~~, and~~

at least the woven fabric in a layer situated on a loaded surface in contact with the plug comprises ~~comprising~~ at least 90 wt% of polyethylene fibres with a titre of at most 1000 denier.

2. (original) Process according to claim 1, wherein the woven fabric in a layer on a loaded surface is an i-over-j woven fabric of fibres with a titre t denier with an exposed fibre length on the surface of at most $\sqrt{t}/(250/\max(i,j))$ cm.

3. (previously presented) Process according to claim 2, wherein the exposed fibre length on the surface is at most $\sqrt{t}/(330/\max(i,j))$ cm.

4. (original) Process according to claim 3, wherein prior to compression the woven fabric is kept at a temperature of between 120 and 145°C for a period of between 1 and 30 minutes and under tension.

5. (previously presented) Process according to claim 1, wherein the polyethylene has an IV, measured in decalin at 135°C, of 4-40 dl/g.

6. (previously presented) Process according to claim 1, wherein at least the woven fabric in a layer situated on a loaded surface comprises at least 90 wt% of fibres that consist of monofilaments with a titre of at most 10 denier per filament.

7. (previously presented) Process according to claim 1, wherein at least the woven fabric situated in a layer on a loaded surface is a 1 x 1 plain weave fabric.

8. (previously presented) Process according to claim 1, wherein the woven fabric is a multi-layered woven fabric.

9. (previously presented) Process according to claim 1, wherein the woven fabric is a three-dimensional woven fabric.

10. (previously presented) Process according to claim 1, comprising bringing the woven fabric, under tension, to a temperature between 0 and 5°C below the temperature at which compression takes place, contacting the woven fabric brought to the required temperature with the hollow mould part under the pressure of the plug for a period of between 1 and 30 minutes, and compressing the woven fabric under a pressure of at least 0.05 MPa for a period of between 2 and 30 minutes.

11. (original) Process according to claim 10, wherein at least the woven fabric in the layer situated on a loaded surface has an exposed fibre length on the surface of at most $\sqrt{t}/(250/\max(i,j))$ cm.

12. (previously presented) Process according to claim 10, wherein the prosthetic joint is a hip socket.

13.-16. (canceled)

17. (new) Process according to claim 1, wherein step (b) comprising clamping the one or more layers of woven fabric between a pressure element and a top edge of the socket-shaped mould.